



United States
Department of
Agriculture

Forest
Service

R3 Regional Office

333 Broadway SE
Albuquerque, NM 87102
FAX (505) 842-3800
V/TTY (505) 842-3292

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Regional Director
Bureau of Indian Affairs
Southwest Regional Office
P.O. Box 26567
Albuquerque, NM 87125

Dear Sir:

An evaluation of proposed FY 2004 forest insect and disease prevention/suppression projects on the Mescalero Apache Indian Reservation (MAIR) was conducted on June 4 and August 21 by Dave Conklin of our staff. Participating in the June meeting were Bill Hornsby and Greg Campbell (Mescalero Agency), Clyde Davis (Resource Management and Protection, Mescalero Tribe), Beverly Schwab (Southwest Regional Office), and Karen DeBord (Central Office, BIA). The August meeting included Bill and Clyde, along with Bernie Ryan and Mark Paul (Mescalero Agency).

Proposed treatments are in recently harvested portions of the Nogal and Inde-Taazhe logging units, and include a total of 2,171 acres. These areas have varying levels of dwarf mistletoe infestation in the ponderosa pine and/or Douglas-fir, and bark beetles have caused recent scattered mortality in the pine. The Nogal unit, examined in June, is in the high-elevation southwestern part of the reservation and is predominantly mixed-conifer forest. The Inde-Taazhe unit, examined in August, is in the lower eastern part of the reservation and is mostly ponderosa pine. In addition to areas included in the FY 04 proposal, we also examined several recently treated stands in these two logging units.

As in past years, the cutting method (i.e., prescription) being used in any given stand is based on existing (pre-sale) stand structure, species composition, and dwarf mistletoe infection level. In most stands, virtually all of the mistletoe-infected trees of merchantable size (down to 9" dbh) have been removed by the sales. The proposed treatments would remove infected and excess smaller trees. Detailed prescriptions and maps of the individual treatment blocks are included in the Agency's proposal.

Single Tree Selection Treatments

A total of 1,109 acres are included under this broad prescription, with 638 acres in the Nogal unit and 471 acres in the Inde-Taazhe unit. These areas have relatively light, patchy dwarf mistletoe infestation, with usually no more than 10 to 15 percent of the total stems infected. Prior to harvest, these stands typically had basal areas of 90 to 150 square feet/acre, with overstocking in small (8-14" dbh) sawtimber, poles, and saplings. The smaller size classes have irregular, often groupy distributions.

Harvest and follow-up treatments will result in basal areas averaging 45 to 55 square feet/acre. Within uninfected portions of these stands, tree spacing will average 15 feet in the non-



commercial size classes. Spacing will vary to favor the best dominant and codominant trees, with ponderosa pine the preferred species for retention. Dwarf mistletoe would be aggressively treated by removing all visibly infected trees, and (in most stands) all host trees within 50 feet of visibly infected trees to account for latent infections.

Based on examinations of several recently treated areas, we think that a 15-foot average spacing in the smaller size classes will allow better use of these sites than the wider spacings used in some past treatment areas. Retention of more saplings and small poles (within uninfected areas) will better take advantage of accumulated growth and allow for future damage and mortality.

The “50-foot mistletoe rule” may be appropriate, given the overall extent and severity of the disease at Mescalero. It will result in small openings in these stands, usually less than one or two acres in size. In some situations, especially in young stands or groups where the latent infections may actually only extend a few feet beyond the edge of visible infection, the 50-foot rule may be excessive. Presumably, leave tree marking will help avoid unnecessary sacrifice of accumulated growth in such situations.

Even-age Regeneration Treatments

This stratum includes both shelterwood with reserves and clearcut with reserves prescriptions. A total of 1,062 acres are included, with 123 acres in the Nogal unit and 939 acres in the Inde-Taazhe unit. These areas have moderate to severe dwarf mistletoe infestation in ponderosa pine and/or Douglas-fir.

Most of the clearcut blocks are 15 to 20 acres in size. These areas have severe infestation and lack an overstory of host trees suitable for retention. Generally, all mistletoe host trees will be removed from these areas, except the youngest (below knee-high) regeneration. Most blocks have non-host trees that will be retained to ameliorate site conditions and take advantage of accumulated growth (the reserve trees). Some blocks appear to be adequately stocked with young natural regeneration, while others may require planting. Regeneration surveys are scheduled 3 to 4 years after treatment to determine the need for planting.

The shelterwood prescription has been used in less severely infested areas that have an overstory component suitable for retention. Both seed cuts (the establishment phase) and removal cuts are included under this prescription. Seed cuts are designated for stands that lack an adequate cohort of young regeneration. Harvest retains 20 to 40 BA of the best available seed trees. In most of these units, all existing host regeneration above knee-high would be “slashed.” Depending on current stocking, non-host trees would be thinned favoring dominants and codominants.

Removal cuts are designated for areas that already have a good cohort of regeneration present. These often resemble the seed cut in appearance, since 10 to 40 BA of non-host or uninfected host reserve trees are usually retained. Treatment of the understory would vary; but as a minimum, all visibly infected trees would be removed. Non-host trees would be thinned as needed favoring dominants and codominants.

Request for Supplemental Funding

This year’s proposal also includes a request for additional funding to complete a previously approved (FY 2001) project in the Inde-Taazhe unit. This 3,663-acre prevention/suppression project (see our 3420 letter of September 12, 2000) was fully funded, with the monies obligated

under contract to the Tribe. To date, 1,445 acres have been treated. Delays in completion of the commercial sale have delayed project implementation in several of the remaining stands. Along with higher than expected costs due to dense stand conditions and the remote location of the project area, these delays have created a shortfall. A relatively modest amount of additional funding is requested to complete treatment over the remaining 2,218 acres.

Summary and Conclusions

The proposed treatments should 1) provide effective control of dwarf mistletoe, 2) reduce potential losses from bark beetles, and 3) increase growth on selected crop trees. We are pleased to support these continuing efforts toward improving long-term forest health and productivity at Mescalero. As in past years, the majority of the FY 2004 treatments would be implemented via contract with Tribal members, through the Tribe's Division of Resource Management and Protection. Treatment costs would be shared between Forest Health Protection, the Mescalero Agency, and the Tribe.

Sincerely,

/s/ David A. Conklin (for)
DEBRA ALLEN-REID
New Mexico Zone Leader,
Forest Health

cc: Bernie Ryan, Branch of Forestry, Mescalero Agency, Bev Schwab, Southwest Regional Office, Thora Walsh-Padilla, Mescalero Tribe, Leonard Lucero